CLUSTER j

	l=1	l=2	...			l=n
R-j1	...	A	...			
R-j2		B				
R-j3		C				
R-j4		A				
R-j5		A				

FIG. 1

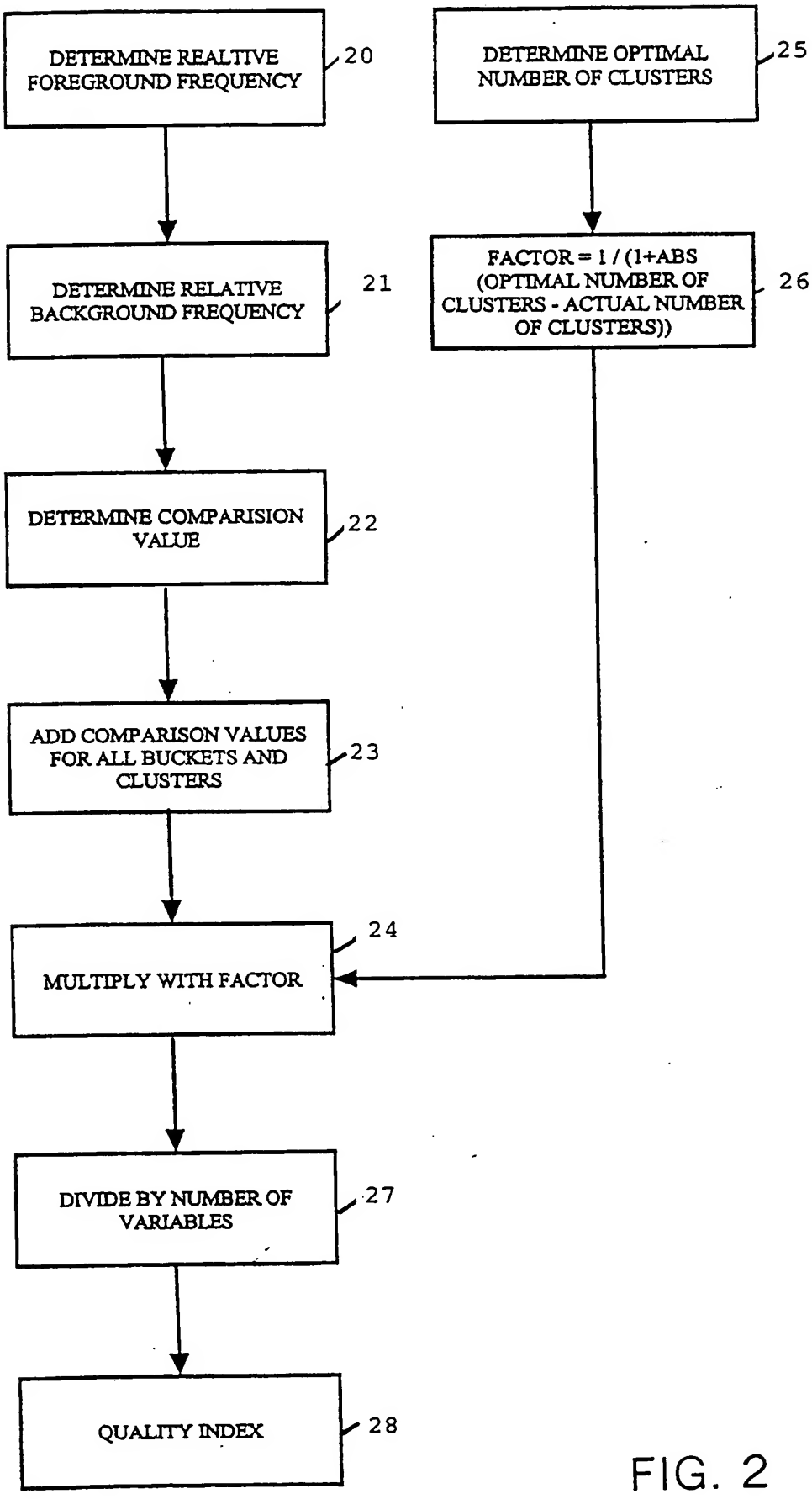
DETERMINE REALTIVE FOREGROUND FREQUENCY
20
DETERMINE OPTIMAL NUMBER OF CLUSTERS
25
DETERMINE RELATIVE BACKGROUND FREQUENCY
21
FACTOR = 1 / (1+ABS (OPTIMAL NUMBER OF CLUSTERS - ACTUAL NUMBER OF CLUSTERS))
26
DETERMINE COMPARISION VALUE
22
ADD COMPARISON VALUES FOR ALL BUCKETS AND CLUSTERS
23
MULTIPLY WITH FACTOR
24
DIVIDE BY NUMBER OF VARIABLES
27
QUALITY INDEX
28

FIG. 2

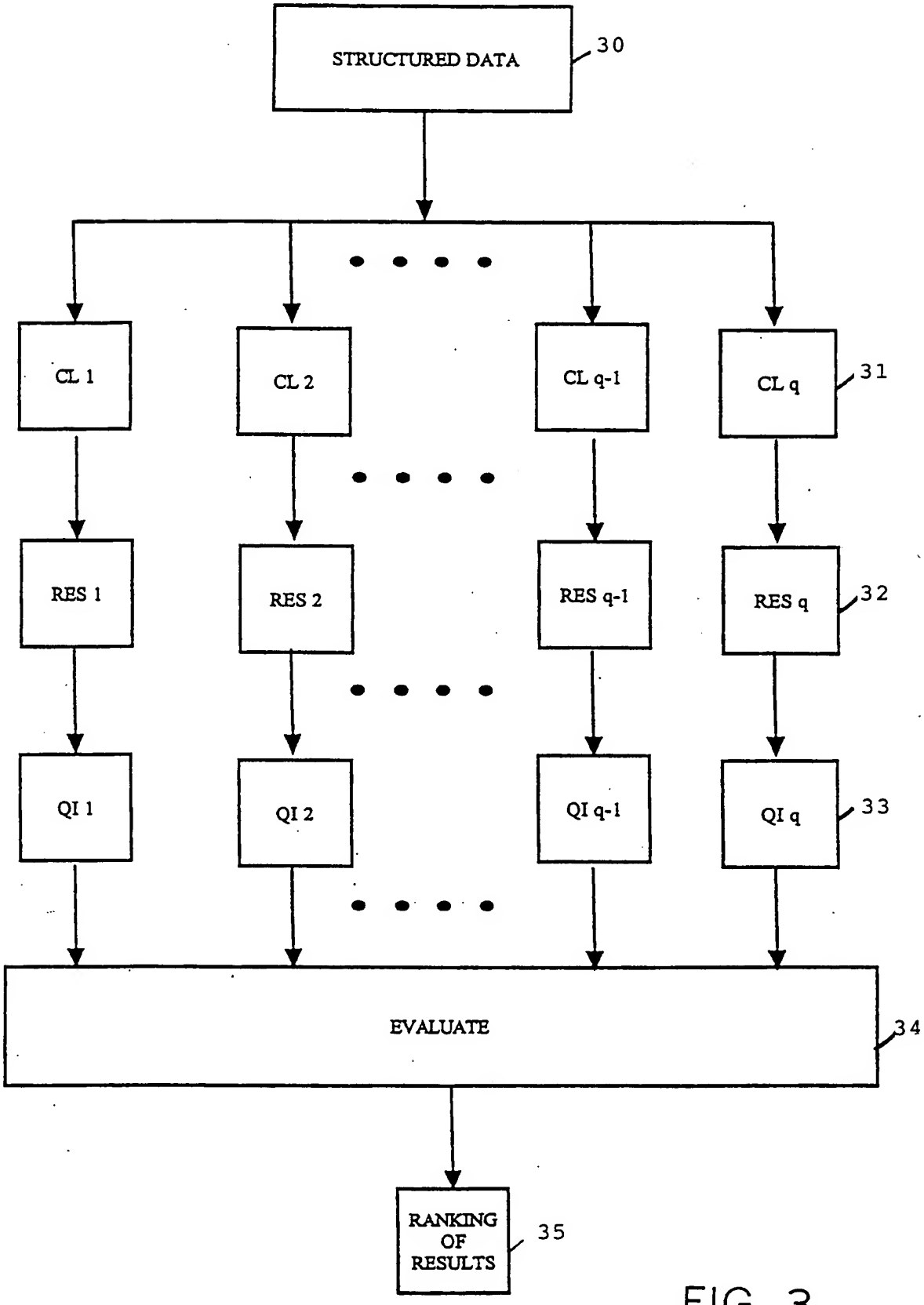
STRUCTURED DATA
30
CL 1
CL 2
CL q-1
CL q
31
RES 1
RES 2
RES q-1
RES q
32
QI 1
QI 2
QI q-1
QI q
33
EVALUATE
34
RANKING OF RESULTS
35

FIG. 3

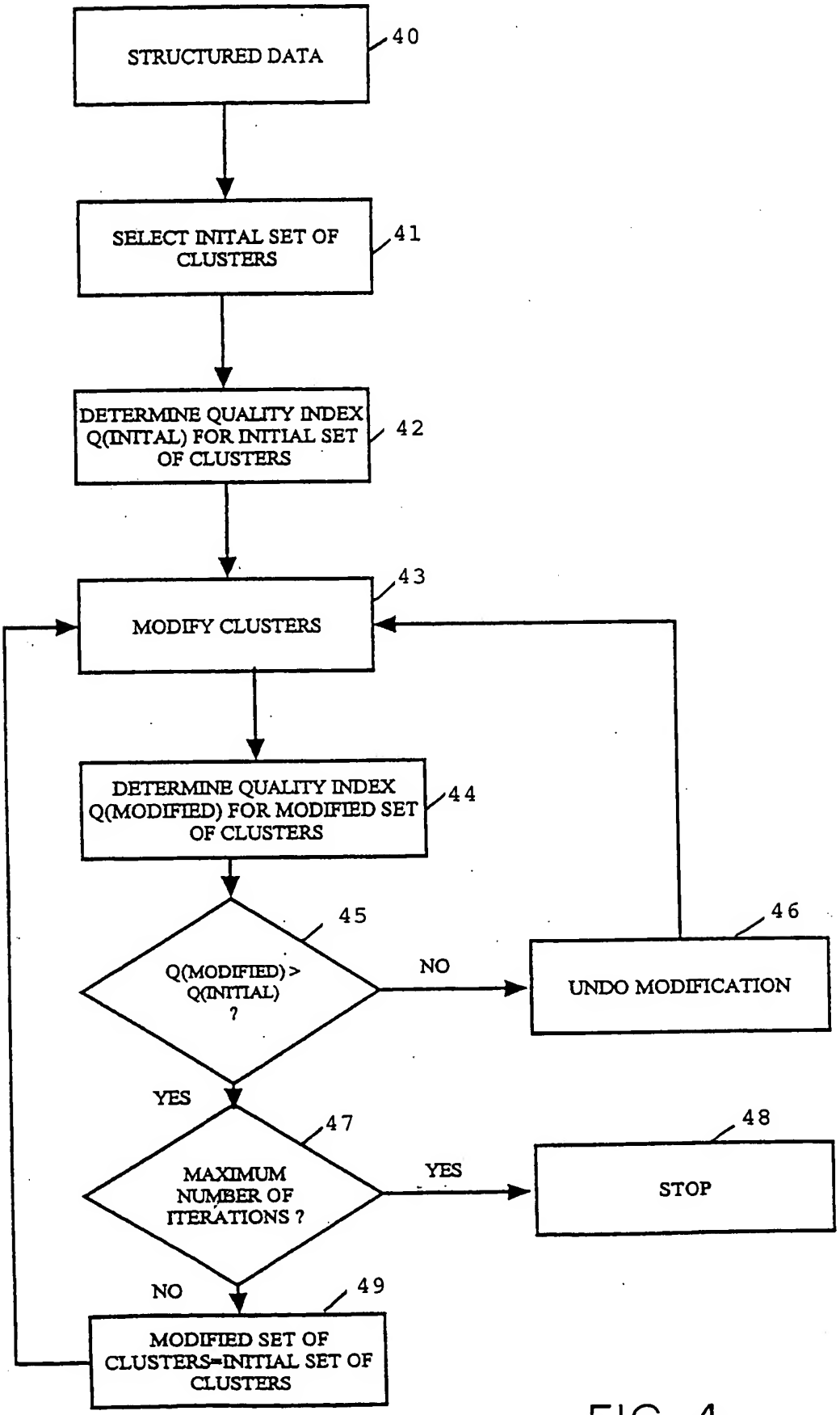
STRUCTURED DATA
40
SELECT INITAL SET OF CLUSTERS
41
DETERMINE QUALITY INDEX Q(INITAL) FOR INITIAL SET OF CLUSTERS
42
MODIFY CLUSTERS
43
DETERMINE QUALITY INDEX Q(MODIFIED) FOR MODIFIED SET OF CLUSTERS
44
Q(MODIFIED) > Q(INITIAL) ?
45
NO
UNDO MODIFICATION
46
YES
MAXIMUM NUMBER OF ITERATIONS ?
47
YES
STOP
48
NO
MODIFIED SET OF CLUSTERS=INITIAL SET OF CLUSTERS
49

FIG. 4

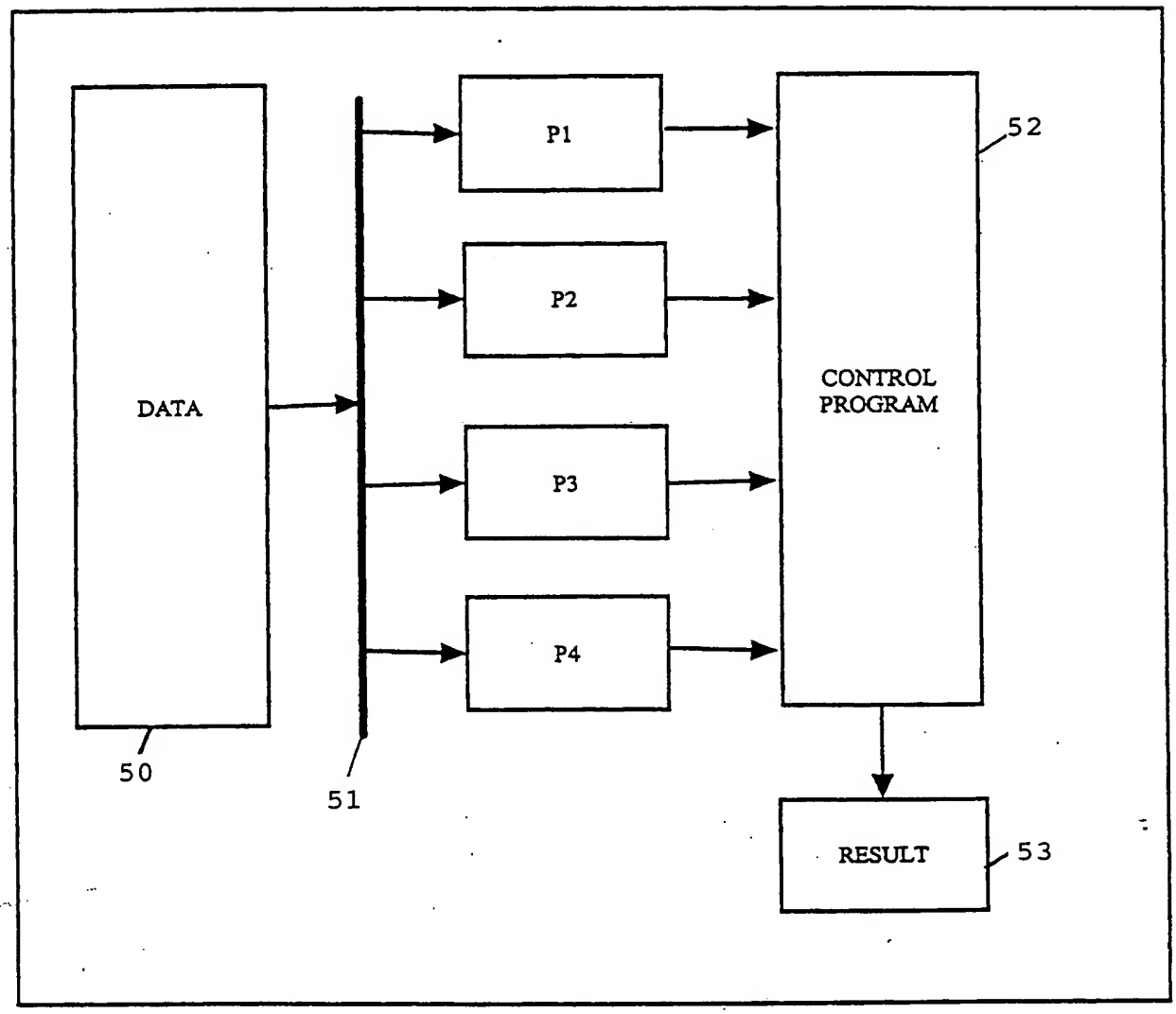

FIG. 5